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***IN THE UNITED STATES PATENT AND TRADEMARK OFFICE***

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In re application of: Chang, Gordon K.

Attorney Docket No.: DKTRP003

Application No.: 10/086,268

Examiner: Nguyen, Steven H.D.

Filed: March 4, 2002

Group: 2665

Title: APPARATUS AND METHOD FOR  
INTEGRATED VOICE GATEWAY

Confirmation No.: 5167

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Signed: \_\_\_\_\_/Laura M. Dean/  
Laura M. Dean

**APPEAL BRIEF TRANSMITTAL  
(37 CFR 192)**

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Sir:

This brief is in furtherance of the Notice of Appeal filed in this case on May 7, 2008.

This application is on behalf of

☒ Small Entity      ☐ Large Entity

Pursuant to 37 CFR 1.17(f), the fee for filing the Appeal Brief is:

☒ \$255.00 (Small Entity)    ☐ \$510.00 (Large Entity)

☐ Applicant(s) hereby petition for a \_\_\_\_\_ extension(s) of time to under 37 CFR 1.136.

If an additional extension of time is required, please consider this a petition therefor.

☐ An extension for \_\_\_\_\_ months has already been secured and the fee paid therefor of \$ \_\_\_\_\_ is deducted from the total fee due for the total months of extension now requested.

☒ Applicant(s) believe that no (additional) Extension of Time is required; however, if it is determined that such an extension is required, Applicant(s) hereby petition that such an

extension be granted and authorize the Commissioner to charge the required fees for an Extension of Time under 37 CFR 1.136 to Deposit Account No. 50-4481.

Total Fee Due:

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| Appeal Brief fee       | \$255.00 |
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☒ The Commissioner is authorized to charge the required fees, and/or any additional fees or credit any overpayment to Deposit Account No. 50-4481, (Order No. DKTRP003).

Respectfully submitted,  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex Parte CHANG

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Application for Patent: 10/086,268

Filed: March 4, 2002

Group Art Unit: 2619

Examiner: NGUYEN, Steven H D

For:

APPARATUS AND METHOD FOR INTEGRATED VOICE GATEWAY

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APPEAL BRIEF

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**DKTRP003**

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CERTIFICATE OF EFS-WEB TRANSMISSION

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Signed: \_\_\_\_\_/Laura M. Dean/  
Laura M. Dean

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**1. REAL PARTY IN INTEREST**

[37 CFR 41.37(c)(1)(i)]

The real parties in interest are:

DKR SoundShore Oasis Holding Fund Ltd.  
c/o Codan Trust Companies (Cayman) Limited  
Century Yard, Cricket Square  
Hutchins Drive  
P.O. Box 2681 GT  
George Town, Grand Cayman  
KY1-1111  
Cayman Islands

and

Trinad Capital Master Fund, Ltd.  
c/o Charlie Bentz, CFO  
2121 Avenue of the Stars, Suite 2550  
Los Angeles, CA 90035

**2. RELATED APPEALS AND INTERFERENCES**

[37 CFR 41.37(c)(1)(ii)]

There is a related appeal in application no. 10/086,602. (Atty. Docket No.: DKTRP002)

**3. STATUS OF CLAIMS**

[37 CFR 41.37(c)(1)(iii)]

The following claims have been rejected and appealed: claims 1-15.

The following claims have been cancelled: NONE.

The claims on appeal are reproduced below in the Appendix at Section 9 of this Appeal Brief.

**4. STATUS OF AMENDMENTS**

[37 CFR 41.37(c)(1)(iv)]

No amendments were filed subsequent to final rejection.

## 5. SUMMARY OF CLAIMED SUBJECT MATTER

[37 CFR 41.37(c)(1)(v)]

### 5.1. Independent Claim 1

Independent claim 1 is directed to a communication system. We provide a summary of the subject matter recited in claim 1 with reference to Figs. 1, 2, 3A, 48, 49, 57 and 58, although aspects of the recited subject matter are described throughout the present application. The system includes a public switched telephone (PST) network (16, Figs. 1, 2, 57 and 58). The system also includes an internet protocol (IP) network (18, Figs. 1, 2, 49, and 58). A private branch exchange (PBX) (34, Figs. 2, 57 and 58) has a telephone (38, Figs. 2, 49, 57 and 58) coupled thereto to route a telephone call over the PST network.

A user CTI control mechanism has an interface (24, 95, Figs. 48, 49, and 57) via which each of a plurality of particular users can configure a CTI application (97, Fig. 48; 80, Fig. 58) to logically associate a computer and a gateway telephone in physical proximity to the computer with the telephonic identity of that particular user.

Significantly, the CTI control mechanism integrates enterprise directory information (90, Figs. 3A, 57) into the operation of the CTI control mechanism with respect to that particular user. The enterprise directory is a directory of named objects, including users, network devices and network services ([0085], [0086])<sup>1</sup>. For example, as set forth at [0019],

It is an object of the invention to provide an integrated voice gateway system which can track any move, add or change to any telephone user in the enterprise in the integrated voice gateway system. It is a further object of the invention to provide an integrated voice gateway system which can integrate with an enterprise directory to allow single point of entry of moves, adds and changes to telephone users and to provide replication of these changes across all enterprise sites.

As recited at [0085], “[t]he implementation of the enterprise directory 90 in the integrated voice gateway system of the invention includes the extension of the directory schema to support IP telephony.” This feature is not explicitly recited in claim 1 (and is not relied upon in distinguishing from the cited references), but it illustrates how the enterprise directory may be employed with regard to the claim 1

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<sup>1</sup> For convenience, reference is made throughout this Appeal Brief to paragraphs of Applicant’s published patent application no. 2003/0095542, published on May 22, 2003.

subject matter. See, also, [0118] et seq., which provides an extensive discussion of “Enterprise Directory Schema Extensions” to support IP telephony.

A voice gateway (26; Figs. 49, 57 and 58) is coupled to the PBX and to the IP network to route a telephone call over the IP network, the voice gateway configured to support a plurality of numbering plans. See [0145] et seq.

#### *5.2. Independent Claim 5*

Independent claim 5 recites a method of operating a communication system to route a telephone call over an IP network. The communication system has a plurality of voice gateways coupled to the IP network, each of the plurality of gateways identified by an IP address. See Fig. 5 and [0164]. While Fig. 5 illustrates a single “called gateway server 126,” [0164] makes clear that this is one of a plurality of gateway servers that may be coupled to the “caller gateway server 26” based on an IP address determined for a particular destination phone number.

The claim 5 method further recites providing a user CTI control mechanism to configure a CTI application, including integrating enterprise directory information of the CTI control mechanism, the enterprise directory including a directory of named objects, including users, network devices and network services. This subject matter is summarized above, with respect to independent claim 1, and so that summarization is incorporated herein by reference with respect to summarizing this similar subject matter of independent claim 5.

The claim 5 method further recites accepting a number entered via a calling telephone by a user in accordance with a plurality of numbering plans and routing the telephone call from the calling telephone to a called telephone. Again, this subject matter is summarized above, with respect to independent claim 1, and so that summarization is incorporated herein by reference with respect to summarizing this similar subject matter of independent claim 5.

## **6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

[37 CFR 41.37(c)(1)(vi)]

### **6.1. Ground I:**

Claims 1-11 are rejected under 35 U.S. C. 103(a) as being unpatentable over Maroulis (USP 6584094) in view of Ford (USP 6463051) and Rogers (USP 5946386).

### **6.2. Ground II:**

Claims 12-13 and 14-15 are rejected under 35 U.S. C. 103(a) as being unpatentable over Maroulis (USP 6584094) in view of Ford (USP 6463051) and Rogers (USP 5946386), as applied to claims 1 and 5, and further in view of Petty (USP 6337858).

## **7. ARGUMENT**

[37 CFR 41.37(c)(1)(vii)]

### **7.1. Ground I**

#### *7.1.1. Claims 1 to 11*

*The Examiner contends that Rogers (and perhaps Ford) disclose the “Enterprise Directory” feature of Independent Claims 1 and 5*

Applicant’s argument on appeal with respect to independent claims 1 and 5 is focused on refuting the Examiner’s contention, at pages 3 and 4 of the Final Office Action (dated November 8, 2007) that the “Call Management Database 215” disclosed by Rogers in Fig. 5 and at col. 9, line 16-17, is an “enterprise directory of named objects, including users, network devices and network services.” With respect to the “named objects,” the Examiner further refers to “(Figs. 6-9 of Rogers, specifically citing “Fig. 6-9, Name, Fax ‘device’, call forward ‘service’).”

Furthermore, while it is not entirely clear, it appears that the Examiner may also be contending that the Ford database 54 additionally corresponds to the “enterprise directory” of claims 1 and 5. It is not entirely clear, since the Examiner



merely notes, at page 3 of the Final Office Action, with respect to Ford that “Fig. 2, Ref 54 is a database for translating the telephone number plans such as international and National numbering plans....” However, the Examiner further notes, in the Response to Arguments section at pages 6-7 of the Final Office Action, that:

In reply, Ford discloses a database which includes named objects dialed pattern and IP address of the network device and Roger [sic] discloses a directory database which includes named objects [sic] includes users, network devices and network services.

Summary of Argument Points

Applicant will make the following argument points in some detail:

- The Examiner is misguided in stating, in the Final Office Action at page 7, that “the features upon which applicant relies (i.e., the different [sic] between the database of the application and the database of the prior arts) are not recited in the rejected claims(s).” Applicant is not reading limitations into the claims.
- The term “enterprise directory of named objects, including users, network devices and network services” cannot be properly construed to include a “call management database” or a “database for translating the telephone number plans such as international and National numbering plans,” as disclosed in the cited references.
- Unless the Applicant intends for the term “enterprise directory of named objects, including users, network devices and network services” to have a meaning other than the “ordinary and customary” meaning, there is no requirement for Applicant to explicitly define the term “enterprise directory” in the specification and/or distinguish the term from other, different, terms used in the cited prior art.

Applicant is not Attempting to Read Limitations from the Specification into the Claims

With regard to the Examiner’s statement that the features upon which applicant relies are not recited in the rejected claims (page 7 of the Office Action), Applicant relies on the distinction between an “enterprise directory” and a “call management database” (Rogers) and “a database for translating the telephone number plans such as international and National numbering plans” (Ford). The term “enterprise directory” (which, it is noted, is not recited in the claim as being a “database,” despite the Examiner’s numerous allegations to the contrary) is explicitly recited in the claims as being “a directory of named objects, including users, network devices and network services.”

The Examiner has further stated that “Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.” (Page 7 of the Office Action). Unfortunately, the Examiner does not state what are these “features” upon which Applicant relies that are not recited in the rejected claims.

In any event, in arguing that the references fail to show the “enterprise directory” feature of Applicant’s claims, Applicant relies on the plain meaning of the “enterprise directory” feature. This plain meaning is amply evidenced by knowledge held by one of ordinary skill in the art around the time of filing the patent application, as well as by the specification. The specification supports Applicant’s allegation as to the plain meaning of what the “enterprise directory” is (and is not). Significantly, Applicant is not reading any limitations from the specification into the claims.

*The Term “Enterprise directory” Cannot be Properly Construed to Include a “Call Management Database” or “a Database for Translating the Telephone Number Plans such as International and National Numbering Plans” as Disclosed by Rogers and Ford, Respectively*

During prosecution of the present patent application (see Amendment B, filed February 28, 2007.) Applicant amended the independent claims to recite that enterprise directory information is integrated into the operation of the CTI control mechanism with respect to a particular user, wherein the enterprise directory is a directory of named objects, including users, network devices and network services.

In making the amendment, Applicant stated that

The independent claims now recite that the user CTI control mechanism has “an interface via which each of a plurality of particular users can configure a CTI application to logically associate a computer and a gateway telephone in physical proximity to the computer with the telephonic identity of that particular user.”

See Page 6 of Amendment B. Applicant also further argued that none of the references cited at the time the amendment was made recite that enterprise directory information is integrated into the operation of the CTI control mechanism with respect to a particular user, wherein the enterprise directory is a directory of named objects, including users, network devices and network services. The final rejection being appealed is similar to the rejection that was outstanding at the time of the

amendment, except that one reference (Rogers) has been substituted for another reference (Dekelbaum).

As mentioned above, it should be noted that nowhere do Applicant's claims recite that the enterprise directory is a database, as the Examiner repeatedly contends. This is a misconception upon which the Examiner's rejection appears to rely. Rather, Applicant's claims 1 and 5 refer to an "enterprise directory" and not to an enterprise directory "database."

The term "enterprise directory" has a well-understood meaning to those of ordinary skill in the art around the time the present patent application was filed. The well-understood meaning of "enterprise directory" is not inclusive of a general purpose database. More particularly, it was well understood that an "enterprise directory" is not a call management database, nor a "database for translating the telephone number plans such as international and national numbering plans."

In support of this contention, Applicant refers herewith to evidence (not newly cited here but, rather, evidence that was before the Examiner during regular prosecution, provided as an appendix to Amendment C, filed on September 5, 2007) that the "enterprise directory of named objects, including users, network devices and network services" recited in the claims is not covered by the Ford and Rogers "databases." This evidence includes several references from about the time of Applicant's priority date that show very clearly that one of ordinary skill in the art would quite clearly consider the Ford and Rogers "databases" to be different from the "enterprise directory" recited in the claims.

The first such reference is "T. Howes and M. Smith, LDAP: Programming Directory Enabled Applications with Lightweight Directory Access Protocol. Macmillan Technology Series, 1997." Appendix A of the Evidence Appendix includes the cover and publication pages from the reference, and also includes an excerpt from pages 4-5. In the excerpt from pages 4-5, in the section entitled "What a Directory Service is Not," it is clearly stated that a directory service is not a general purpose database. While this entire section is provided in Appendix A of the Evidence Appendix, Applicant would like to highlight one particular paragraph:

The first thing you should not do is treat the directory like a general database. It's not designed with that kind of use in mind, and you'll likely be

disappointed with the results. This means the directory is not suited to provide transaction-based service, cannot generally handle huge numbers of updates, and usually would make a bad engine for an SQL application.

The second such reference is United States Patent No. 6,016,499, assigned on its face to Novell, Inc. The filing date of the priority provisional application is February 20, 1997, and the filing date of the non-provisional application is July 21, 1997. At col. 1, line 60 et seq, for example, the applicant of the 6,016,499 patent clearly, and at some length, distinguishes between “directory services” and “relational databases.”

Unlike relational databases, “directory service” structures are a relatively recent development in information technology. The need for directory services became clear only after computer networks became a prominent part of the information landscape and grew so large and complex that their administration required full-time attention from specialists. Directory services are sometimes referred to as “naming services.”

A variety of directory service providers are now available to help administer both the location of network resources and the rights of network users to use those resources. Many, but not all, directory service tools conform at least in part with the X.500 directory services standard. One well-known directory service system includes NetWare Directory Services software commercially available from Novell, Inc. of Provo, Utah (NETWARE DIRECTORY SERVICES is a trademark of Novell, Inc.). As used herein, “Novell Directory Services” (“NDS”) includes NetWare Directory Services and any other directory service commercially available from Novell, Inc.

In contexts other than the present one, a directory services repository is sometimes called a directory services “database.” Both repositories and databases may be distributed, because that is mainly a matter of storage and locks for enforcing consistency, rather than a question of the basic internal structure. But “database” and “repository” are not interchangeable in the present context.

A repository supports naming services. Each repository is organized hierarchically, as one or more trees. Each object in a tree (except the root object) has exactly one parent. Objects may generally have children, which may inherit properties from their ancestor objects. Objects are instances of “classes,” as described in detail below.

By contrast, “database” as used herein refers to a relational database. A given database may support any of a wide variety of commercial or personal activities. Each database is organized as a set of tables in which rows represent records and columns represent record fields. Certain fields may be found in multiple tables, and the values of these “key” or “index” fields are used to guide database searches. Database access and manipulation involve combining information from various tables into new combinations to obtain different views of the data.

In short, databases and repositories arose at different times to meet different needs, and have different structures and capabilities. There is no need to dwell further here on the details of relational database structure, SQL, or ODBC, as numerous references on those topics are widely available. Many computer science professionals have also taken at least one course in databases.

A third reference, provided in Appendix B of the Evidence Appendix, is “The SLAPD and SLURPD Administrator’s Guide, University of Michigan, 30 April 1996, Release 3.3.” In addition to the cover, publication pages and Table of Contents, Applicant provides herewith an excerpt consisting of pages 1-10. In the excerpt, in the section entitled “1.1 What is a directory service?” it is discussed how a directory service differs from a database. The entire section 1.1 (which is only two paragraphs), is reproduced below:

### **1.1 What is a directory service?**

A directory is like a database, but tends to contain more descriptive, attribute-based information. The information in a directory is generally read much more often than it is written. As a consequence, directories don't usually implement the complicated transaction or roll-back schemes regular databases use for doing high-volume complex updates. Directory updates are typically simple all-or-nothing changes, if they are allowed at all. Directories are tuned to give quick-response to high-volume lookup or search operations. They may have the ability to replicate information widely in order to increase availability and reliability, while reducing response time. When directory information is replicated, temporary inconsistencies between the replicas may be OK, as long as they get in sync eventually.

There are many different ways to provide a directory service. Different methods allow different kinds of information to be stored in the directory, place different requirements on how that information can be referenced, queried and updated, how it is protected from unauthorized access, etc. Some directory services are local, providing service to a restricted context (e.g., the finger service on a single machine). Other services are global, providing service to a much broader context (e.g., the entire Internet). Global services are usually distributed, meaning that the data they contain is spread across many machines, all of which cooperate to provide the directory service. Typically a global service defines a uniform namespace which gives the same view of the data no matter where you are in relation to the data itself.

With these three pieces of evidence from around the time of the filing of the present patent application, the message is consistently clear. The “enterprise directory” recited in the claims is not a “call management database” nor a “database for translating the telephone number plans such as international and National numbering plans” as disclosed in Ford and Rogers, and which are relied upon by the Examiner in rejecting the claims.

The Examiner is Incorrect in the Requirement, Stated During the July 23, 2007 Interview, in an Advisory Action in the Related 10/086,602 Application, and in the Response to Arguments Section of the Final Office Action in the Present Application, that Applicant's Specification Must Show the Difference between a "Database" and an "Enterprise Directory."

We now discuss the Examiner's contention that Applicant's specification must show the difference between a "database" and an "enterprise directory." As mentioned above, this contention was made in both the July 23, 2007 Examiner interview in the present application and related application (10/086,602), as well as in the advisory action in the related application, and in the Final Office Action in the present application. Actually, again mistakenly asserting that Applicant's claims recite a "database," the Examiner conclusorily states in the Final Office Action, at page 7 (emphasis added), "The database of the prior arts discloses the limitation of the database of the applicant because the specification of the application does not disclose how the two databases are distinguished from each other."

In refuting the Examiner's requirement about what the specification must say, we specifically refer to MPEP 2111.01 and legal support referred to therein, which discusses the subject of ascribing the "plain meaning" to claim terms. For example, in Amendment C in the related application 10/086,602, Applicant pointed out, without extensive discussion or support, that:

It is respectfully submitted that there is no such requirement for Applicant's specification to distinguish between a "database" and an "enterprise directory." If this was the case, then applicants would be required to predict every rejection an Examiner may present and provide rebuttal distinguishing language in the specification, even before the patent application has been filed. Clearly, this cannot be the requirement.

Given that the Examiner continues to require (e.g., in the Advisory Action in the related application 10/086,602) that Applicant's specification distinguish between a "database" and an "enterprise directory" and also mentions such a requirement in the Final Office Action of the present patent application, Applicant now discusses in greater detail the concept of "plain meaning" and "ordinary and customary meaning" attributed to a term by "those of ordinary skill in the art." More particularly, Applicant discusses MPEP 2111.01 and some Federal Circuit cases on the same point, as rebuttal to the Examiner's requirement that Applicant's specification must

show the difference between a database having the properties disclosed in Ford and Rogers and an enterprise directory as recited in the claims.

For example, MPEP 2111.01 quotes the Phillips v. AWH case, reciting “[T]he ordinary and customary meaning of a claim term is the meaning the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application.” MPEP 2111.01 also quotes the Brookhill-Wilk 1, LLC, v. Intuitive Surgical, Inc. case, reciting “In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meaning attributed to them by those of ordinary skill in the art.” As a last example, MPEP 2111.01 also quotes the ACTV, Inc. v. The Walt Disney Company case, which recites “Since there was no express definition for the term ‘URL’ in the specification, the term should be given its broadest reasonable interpretation consistent with the intrinsic record and take on the ordinary and customary meaning attributed to it by those of ordinary skill in the art...”

Thus, MPEP 2111.01 and the cases cited therein implore the Examiner to use the “ordinary and customary meaning” attributed to the term “enterprise directory” *absent* some indication on the part of Applicant to impart a novel meaning to the term. Put another way, unless the Applicant intends for the term “enterprise directory” to have a meaning other than the “ordinary and customary” meaning, there is no requirement for Applicant to explicitly define the term “enterprise directory” in the specification and/or, most significantly, distinguish the term from “database” as used, for example, in Ford and Rogers.

As Applicant has pointed out in great detail, the “ordinary and customary meaning” attributed to the term “enterprise directory” is not covered by a database and, in fact, explicitly disclaims the notion of being covered by a database, particularly the databases disclosed by Ford and Rogers. The Examiner has refused, in the related application 10/086,602 to consider Applicant’s provided evidence of such, instead insisting that Application should have foreseen the argument the Examiner would make regarding the term “database.”

Perhaps the Examiner is mixing in the doctrine of “A patentee may be his own lexicographer.” In accordance with that doctrine, MPEP 2111.01 cites the In re Paulsen case, reciting that (emphasis added) an “inventor may define specific terms used to describe invention, but must do so ‘with reasonable clarity, deliberateness, and precision’ and, if done, must “set out his uncommon definition in some manner within the patent disclosure “so as to give one of ordinary skill in the art notice of the change’ in meaning.” However, this requirement for the Applicant to define specific terms in the specification does not apply where the Applicant is not making an “uncommon definition” to change the meaning of terms from what would be the ordinary and customary meaning. That is, Applicant is not changing the meaning of the term “enterprise directory” from what is the ordinary and customary meaning as evidenced, for example, by the various references cited to the Examiner above and provided herein in the appendices.

Given all this, perhaps the Examiner does in fact believe that a reasonable interpretation of “enterprise directory” is broad enough to be covered by the databases disclosed by Ford and Rogers, but the Examiner has not asserted this. MPEP 2111.01 discusses, again referring to the Phillips v. AWH case, “The ordinary and customary meaning of a term may be evidenced by a variety of sources, including ‘the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.’” Of course, as discussed above, Applicant believes that all these sources, and particularly the extrinsic evidence, make clear, contrary to what may be the Examiner’s belief, that the ordinary and customary meaning of “enterprise directory” is not broad enough to be covered by databases disclosed by Ford and Rogers and cited by the Examiner.

Applicant recognizes that, in some circumstances, it may be proper to look to a patent specification to find evidence of the intended meaning of a claim term when there are two or more commonly accepted meanings of the claim term. In the correct context, this situation would be limited, though, to the circumstance referenced in MPEP 2111.01 in which the evidence of ordinary and customary meaning is ambiguous. This is not the case here. Referring to the Brookhill-Wok case, MPEP 2111.01 states “If extrinsic sources, such as dictionaries, evidence more than one



definition for the term, the intrinsic record must be consulted to identify which of the different possible definitions is most consistent with applicant's use of the terms."

Also, referring to the Renishaw plc v. Marposs Societa' per Azioni case, MPEP 2111.01 states "Where there are several common meanings for a claim term, the patent disclosure serves to point away from the improper meanings and toward the proper meanings." In this case, there are not multiple common meaning for "enterprise directory" as recited in the claims.

Applicant has pointed out several items of extrinsic evidence to support the definition of "enterprise directory" as distinct from a database such as disclosed by Ford and Rogers and cited by the Examiner. If the Examiner continues to require Applicant's specification to explicitly define the "enterprise directory" claim term, then Applicant respectfully requests the Examiner to point out evidence of another ordinary and customary meaning of "enterprise directory" that may include a database such as disclosed by Ford and Rogers.

In the absence of such a showing by the Examiner, it is respectfully submitted that:

- The ordinary and customary meaning of "enterprise directory" is unambiguous, as evidenced by the several items of extrinsic evidence pointed out by Applicant;
- Since the ordinary and customary meaning of "enterprise directory" is unambiguous, there is no independent reason to look to Applicant's specification to identify a particular meaning intended by Applicant.

The ordinary and customary meaning of "enterprise directory" cannot be construed to include a database such as the databases disclosed by Ford and Rogers.

That said, contrary to the Examiner's assertions, it should be noted that, even in Applicant's specification, the "enterprise directory" is distinct from a database, and there is no evidence of an express intent to impart a novel meaning to the claim term "enterprise directory." Thus, the words are presumed to take on the ordinary and customary meaning attributed to them by those of ordinary skill in the art, which meaning has been amply demonstrated.

For example, at [0095] of Applicant's specification, it is stated that (emphasis added):

The preferred embodiment of the invention includes the X.500 compatible enterprise directory. However, in installations which do not have an X.500

compatible enterprise directory, the alternative embodiments of the gateway network of the invention may include other database configurations. For example, one alternate embodiment may be used in systems which have an SQL Server database. The schema extensions may be added to the existing data structures in the SQL database, or a new, comprehensive schema may be established.

Rather than showing an express intent to impart a novel meaning to the “enterprise directory” claim term, this section at [0095] of Applicant’s specification is entirely consistent with the understanding of one of ordinary skill in the art that an “enterprise directory” is not a database, since the database is described as being “one alternate embodiment” to an enterprise directory embodiment.

Referring further to [0096] of Applicant’s specification, an alternate embodiment (a “database designated the master database”) of an enterprise directory is set forth. Notably, though, the embodiment described in [0096] does not describe the “master database” as being a directory “of named objects, including users, network devices and network services,” as the enterprise directory is explicitly recited in claims 1 and 5. This paragraph [0096] merely states, in its entirety:

In a second alternative embodiment, the enterprise directory includes a database designated the master database at a first location, and duplicate databases, designated slave databases at the remaining locations in the gateway network. In this master-slave configuration, all database administration is performed on the master database. Updates to the master database are exported to a file which is sent to the other locations and imported into the slave databases. The dredging and synchronization process would be the same as for an X.500 compatible enterprise directory. The database cache 108 is a repository of information contained in RAM in the gateway server 26. The database cache includes data duplicated from the gateway database 51 which data is required to be in RAM to support the performance of the gateway server, and also transient/dynamically changing data, e.g. idle/busy status of users' telephones. Much of the data in the database cache 108 is indexed for rapid retrieval. The gatekeeper agent 52 is the equivalent of an H.323 gatekeeper client.

Since the “master database” is not disclosed as being a directory “of named objects, including users, network devices and network services,” as the enterprise directory is explicitly recited in claims 1 and 5, this statement does not show an intent by the Applicant to set forth an “uncommon definition” of the term “enterprise directory” that is “a directory of named objects, including users, network devices and network

services” so as to give one of ordinary skill in the art notice of an intended change in meaning.<sup>2</sup>

Given the absence in the cited references of a disclosure or suggestion of an “enterprise directory, wherein the enterprise directory is a directory of named objects, including users, network devices and network services,” it is respectfully submitted that claims 1 and 5, and those claims of claims 2-4 and 6-11, that depend on claims 1 or 5, are patentable over the cited references.

## **7.2. Ground II**

### **7.2.1. Claim 12-13 and 14-15**

For the patentability of claims 12-13 and 14-15, Applicant relies herein on the patentability of claims 10 and 5, on which these pairs of claims respectively depend.

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<sup>2</sup> It is noted that, at [0085] of Applicant’s specification, it is stated that “the enterprise directory 90 is a company-wide general purpose directory or global database of named objects including users, network devices (e.g. routers, gateways), and network services (e.g. print servers).” However, this isolated statement using the term “database” does not give one of ordinary skill in the art notice that the Applicant intends an “uncommon definition” that, if taken this way, would be entirely inconsistent with the remainder of the specification, let alone the ordinary and customary meaning “as evidenced by a variety of sources.”

## **8. CONCLUSION**

In view of the foregoing, it is respectfully submitted that the Examiner's rejection of claims 1-11 as being unpatentable over Maroulis, Ford and Rogers is erroneous. Furthermore, the rejection of claims 12-13 and 14-15 as being unpatentable over Maroulis, Ford and Rogers, and further in view of Petty, is also erroneous. Accordingly, the rejection of claims 1-15 under 35 U.S.C. §103 should be reversed.

Respectfully submitted,  
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**9. CLAIMS APPENDIX**

[37 CFR 41.37(c)(1)(viii)]

**CLAIMS ON APPEAL**

1. A communication system comprising:
  - a public switched telephone (PST) network;
  - an internet protocol (IP) network;
  - a private branch exchange (PBX) with a telephone coupled thereto to route a telephone call over the PST network;
  - a user CTI control mechanism having an interface via which each of a plurality of particular users can configure a CTI application to logically associate a computer and a gateway telephone in physical proximity to the computer with the telephonic identity of that particular user, and including integrating enterprise directory information into the operation of the CTI control mechanism with respect to that particular user, wherein the enterprise directory is a directory of named objects, including users, network devices and network services; and
  - a voice gateway coupled to the PBX and to the IP network to route a telephone call over the IP network, the voice gateway configured to support a plurality of numbering plans.
2. A communication system according to claim 1 wherein the voice gateway is coupled to the PBX via a call status-call control link to control operation of the telephone.
3. A communication system according to claim 1, wherein the enterprise directory information is coupled to the voice gateway, and wherein the voice gateway is configured to access the enterprise directory information and to control the telephone to support the plurality of numbering plans.

4. A communication system according to claim 1 wherein the plurality of numbering plans supported includes at least one numbering plan from a group consisting of;

- a uniform numbering plan (UNP);
- an enterprise numbering plan (ENP); and
- a PSTN numbering plan; and
- a direct trunk group access code.

5. A method of operating a communication system to route a telephone call over an internet protocol (IP) network, the communication system having a plurality of voice gateways coupled to the IP network, each of the plurality of voice gateways identified by an IP address, the method comprising steps of:

- providing a user CTI control mechanism having an interface via which each of a plurality of particular users can configure a CTI application to logically associate a computer and a gateway telephone in physical proximity to the computer with the telephonic identity of that particular user, and including integrating enterprise directory information into the operation of the CTI control mechanism with respect to that particular user, wherein the enterprise directory is a directory of named objects, including users, network devices and network services;

- accepting a number entered via a calling telephone by a user in accordance with one of a plurality of numbering plans;

- translating the number into the IP address of one of the plurality of voice gateways; and

- routing the telephone call from the calling telephone to a called telephone.

6. A method according to claim 5 wherein the communication system further comprises a gateway database coupled to the plurality of voice gateways, the gateway

database having the IP addresses of the plurality of voice gateways stored therein, and wherein the step of translating the number comprises steps of:

accessing the gateway database with one of the plurality of voice gateway; and

associating the number with an IP address in the gateway database.

7. A method according to claim 6 wherein the step of associating the number with an IP address comprises the step of manipulating a digit of the number.

8. A method according to claim 5 wherein the step of translating the number includes the step of translating a number from at least one numbering plan from a group consisting of:

a uniform numbering plan (UNP);

an enterprise numbering plan (ENP); and

a PSTN numbering plan; and

a direct trunk group access code.

9. A method according to claim 5 the step of routing the telephone call comprises the step of controlling the plurality of voice gateways to route the telephone call from a first voice gateway over the IP network to a second voice gateway.

10. A method according to claim 5 wherein the communication system further comprises a plurality of private branch exchanges (PBXs) coupled to a public switched telephone (PST) network, each of the plurality of PBXs coupled to one of the plurality of voice gateways through a call status-call control link, and wherein the step of routing the telephone call further comprises the step of controlling a private branch exchange connected to the second voice gateway to route the telephone call to the called telephone.

11. A method according to claim 10 wherein the called telephone is coupled to the private branch exchange through the PST network, and wherein the step of routing the telephone call further comprises the step of controlling the PBX connected to the second voice gateway to route the telephone call over the PST network to the called telephone.

12. The method of claim 1, wherein:  
the interface is a browser interface.

13. The method of claim 12, wherein:  
the browser interface is a browser interface of the computer to be logically associated with the gateway telephone.

14. The method of claim 5, wherein:  
the interface is a browser interface.

15. The method of claim 14, wherein:  
the browser interface is a browser interface of the computer to be logically associated with the gateway telephone.



**10. EVIDENCE APPENDIX**

[37 CFR 41.37(c)(1)(ix)]

No evidence has been submitted pursuant to §§ 1.130, 1.131, or 1.132 of 37 CFR, nor has any other evidence been entered by the examiner.

**11. RELATED PROCEEDINGS APPENDIX**

[37 CFR 41.37(c)(1)(x)]

There have been no decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of 37 CFR 41.37(c)(1).